

Appl. No. 10/803,191
Reply to Office Action of June 15, 2005

REMARKS

Applicants appreciate the thorough examination of the application that is reflected in the Office Action dated June 15, 2005, and the Examiner's indication that claims 42, 43 and 46 have been allowed.

Claim number 22 was inadvertently left out of the application at filing. To correct this error, Applicants renumber claims 23-46 as claims 22-45, respectively. All of the comments which follow with respect to claims 23-46 (as filed) are made with reference to their new claims numbers 22-45.

Applicants change the dependency of claims 42-44 to correct typographical errors so that dependent claims 42-44 now properly depend from allowed claim 41, respectively. These amendments do not alter the scope of claims 43 and 44, but are instead made merely to correct a typographical error. Applicants also amend claim 45 to correct a typographical error. Thus, since claims 41 and 42 have been allowed, Applicants submit that claims 41-45 are in condition for allowance.

The Office indicates that claims 19, 20, 40 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants note that claims 40 and 41, as filed, have been renumbered as claims 39 and 40. To expedite the prosecution of this application, Applicants rewrite claims 19 and 39 in independent form to explicitly include the limitations of independent claims 1 and 21, respectively. Because claims 19 and 39 were indicated as being allowable, Applicants submit that pending claims 19-20 and 39-40 are also in condition for allowance.

Applicants also change the dependency of claims 17 and 37 to correct typographical errors so that dependent claims 17 and 37 now properly depend from claims 16 and 36, respectively. These amendments do not alter the scope of claims 17 and 37, but are instead made merely to correct a typographical error.

Applicants also add new claim 46 which depends from claim 21. New claim 46 is supported, for example, by claim 2 and other portions of the specification. Applicants also add new claims 47-48 which depend from claim 1 and new claims 49-50 which depend from claim

Appl. No. 10/803,191
Reply to Office Action of June 15, 2005

21. New claims 47-50 are supported, for example, by FIGS. 2-6 of the application and their corresponding descriptions.

Claims 1-50 (4 independent claims; 50 total claims) are pending in the application. Claims 19-20 and 39-40 are in condition for allowance since they were indicated as being allowable and have been rewritten in independent form, and 41-45 have been allowed since dependent claims 43 and 44 now properly depend from allowed claims 42 and 41, respectively. Reexamination and reconsideration of the application are respectfully requested.

Claim Objections

The Office objects to claim 22 since it was missing from the application as filed.

Claim number 22 was inadvertently skipped over at filing. To correct this error, Applicants renumber claims 23-46 as claims 22-45, respectively. Applicants respectfully submit that the renumbering of the claims renders this ground of objection moot. Accordingly, Applicants respectfully request that this ground of objection be withdrawn.

Claim Rejections Under 35 U.S.C. 112, 2nd paragraph

The Office rejects claim 44 under 35 U.S.C. 112, 2nd paragraph as being indefinite since the recitations "said first power" and "said second power" appearing in claim 44 allegedly "lack antecedent basis."

Applicants note that claim 44 has been renumbered as claim 43. Applicants submit that the Office's rejection of claim 43 under 35 U.S.C. 112, 2nd paragraph is improper since claim 43 is definite. Applicants do, however, acknowledge that claim 43 is objectionable since the dependency of original claim 43 included a typographical error. The preamble of claim 43 clearly reflects that claim 43 is a method claim, whereas the preamble of claim 4 recites a relay device. As such, rejecting claim 43 as indefinite was improper.

To correct this typographical error, Applicants amend dependent claim 43 such that it now properly depends from allowed method claim 41, as opposed to relay device claim 4. Applicants submit that changing the dependency of claim 43 to correct this typographical error does not alter the scope of claim 43 as filed.

Accordingly, for at least the foregoing reasons, Applicants submit that the rejection of claim 43 under 35 U.S.C. 112, 2nd paragraph should be withdrawn.

Appl. No. 10/803,191
Reply to Office Action of June 15, 2005

Art-based Rejections

Claims 1 and 21

The Office rejects claims 1-8, 10-13, 16, 18, 21, 23-29, 31-34, 37, 39 and 45 under 35 U.S.C. 103(a) as being unpatentable over Eberhardt et al. (U.S. Pat. 6,107,920) (hereinafter referred to as "Eberhardt") in view of Duan (U.S. Pat. 6,147,606) (hereinafter referred to as "Duan"), and rejects claims 9, 14, 15, 17, 30, 35, 36, and 38 further in view of Platt (U.S. Pat. 5,825,291) (hereinafter referred to as "Platt").

Applicants respectfully traverse this rejection for at least the following reasons.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify a reference or to combine the teachings of multiple references. Second, there must be a reasonable expectation of success. Third, the prior art must teach or suggest all of the recited claim limitations. Of course, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. Applicants submit that all of the criteria have not been met in this case.

Claim 1 relates to relay device for a Radio Frequency IDentification (RFID) transponder. The relay device comprises:

- a first antenna;
- a second antenna;
- a transmission line coupling said first antenna and said second antenna; and
- an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder. (Emphasis added.)

Applicants respectfully traverse the rejection of claim 1 for at least the following reasons.

The Office Action of June 15, 2005 indicates that column 4, lines 17-22 of the Eberhardt reference allegedly teaches the "transmission line" recitation of claim 1. The Office Action acknowledges that Eberhardt does not specifically disclose an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder, but cites the Duan reference as allegedly teaching "an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder."

Appl. No. 10/803,191
Reply to Office Action of June 15, 2005

While the Office Action dated June 15, 2005 alleges that the Eberhardt reference teaches the "transmission line" recitation of claim 1, it is unclear which element of the Eberhardt reference allegedly meets the "transmission line" recitation of claim 1.

Applicants submit that the Eberhardt reference fails to disclose that "a transmission line coupling said first and second antennas," as recited claim 1. As shown in FIG. 1 and as discussed at col. 4:16-67 of the Eberhardt reference, nothing in the Eberhardt reference discloses that the first antenna element 24 and the second antenna element 26 are coupled by a transmission line. Rather, as shown in FIG. 1 of the Eberhardt reference, the first coupling region 28 and the second coupling region 30 include a conductive pad area for electrically coupling a chip assembly 12. A chip assembly is not a "transmission line," as recited in claim 1. Thus, Applicants submit that the Eberhardt reference fails to disclose, for example, that "a transmission line coupling said first and second antennas," as recited in claim 1. Applicants submit that the Duan reference, relied on by the Office as allegedly teaching "an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder," and the Platt reference are similarly deficient.

Independent claim 21 also requires "a transmission line coupling said antennas." Applicants submit that claim 21 is also patentable for at least the reasons stated above with respect to claim 1.

Applicants note that the cited references also fail to teach or suggest concepts, such as, "an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder," or "an impedance adjusting circuit coupling the RFID transponder and said transmission media," as recited in claims 1 and 21, respectively. The Office cites col. 2, lines 35-55 of the Duan reference as teaching these limitations, however, Applicants note that the Duan reference merely teaches that the impedance of the tag antenna can be adjusted as opposed to, "an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder," or "an impedance adjusting circuit coupling the RFID transponder and said transmission media," as recited in claims 1 and 21, respectively.

Accordingly, for at least the reasons stated above, Applicants respectfully request reconsideration and withdrawal of the rejections of independent claim 1, along with dependent

Appl. No. 10/803,191
Reply to Office Action of June 15, 2005

claims 2-18 and 46-48; and claim 21, along with renumbered dependent claims 22-38 and 49-50.

Appl. No. 10/803,191
Reply to Office Action of June 15, 2005


In conclusion, for the reasons given above, all claims now presently in the application are believed allowable and such allowance is respectfully requested. Should the Examiner have any questions or wish to further discuss this application, Applicant requests that the Examiner contact the undersigned attorney at (480) 385-5060.

If for some reason Applicant has not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

Dated: October 4, 2005

By: 
Erin P. Madill
Reg. No. 46,893
(480) 385-5060